

Developing a Theory of Action to Support High-Quality Accountability System Design

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While “theory of action” sounds like consultant-speak, it is actually a critical tool for the design and evaluation of policy. It can help illuminate alternatives and competing or even contradictory claims about how a policy initiative should work. This document is intended to be an introduction to theories of action for the design of accountability systems.

In the case of school accountability, policymakers and designers must very explicitly lay out what the proposed accountability indicators and design choices are intended to accomplish; in other words, *why* the accountability system is in place. In the case of education policies, the ultimate goal is often to improve educational opportunities and achievement for students.¹ In addition to the *why*, policy makers must also describe the *how*. For example, one might assert that holding schools accountable for increases in student test scores will lead to more focused instruction and ultimately improvements in student learning. The designer also must specify the mechanism by which these accountability uses will lead to the anticipated changes in teaching practices. For example, one might postulate that incentivizing schools to begin incorporating performance-based assessments will help educators develop higher expectations for student learning. These higher expectations, in turn, will encourage higher performance among students. Having to articulate both the aims and mechanisms of the program via a theory of action will expose proposed policies for evaluating schools that may be untenable and will also shed light on some fruitful means of meeting the major policy goals.

Theories of action are intimately linked to the purposes and uses of the accountability system. Such purposes and uses of the accountability results should be aligned with the stated goals of the system. Therefore, we must be honest and clear about the policy goals. The validity of the

¹ See meeting notes from March 25, 2016 for the stated education goals of the accountability task force members.

accountability system rides, in part, on the utility of the results for achieving the intended outcomes. Through this process—explicitly stating the crucial link between the purposes and uses of the accountability system, and how those processes will lead to what the accountability system is ultimately designed to achieve—theories of action can help us focus our designs on the right things and illuminate where we need to apply more research-based approaches than simply hope! In this way, a theory of action is falsifiable. In other words, the theory of action is not just a set of beliefs, but represents a series of hypotheses that should be based on research or previous practice. This grounded explicitness is critical. When outlining the theory of action, the design team needs to ensure that connections among various aspects of the assessment system are not simply belief statements, but they can be supported by research, ideally, or at least best practices if research is not available.

Some general considerations for designing a theory of action for an accountability system include a description of how:

- (a) Each component of the proposed accountability system must be clearly and convincingly related to the other components in the system (e.g., how the components will work together to achieve the desired outcome);*
- (b) The accountability indicators will be used;*
- (c) The accountability results will be incorporated into a coherent educational system (i.e., a system that includes standards, assessments, curriculum, instruction, and professional development); and*
- (d) The educational system as a whole will improve student achievement and college- and career-readiness (or other relevant goals).*

A theory of action outlines the components of the system, while clearly specifying the connections among these components. Most importantly, a theory of action must specify the hypothesized mechanisms or processes for bringing about intended goals. In the case of an Every Student Succeeds Act (ESSA) accountability system, the theory of action should describe how the particular clear goals will be achieved as a result the proposed accountability system(s). The theory of action must clearly articulate how the educational system will get from “A to B” as a result of the proposed system. In other words, what processes must be in place in order for the

state to achieve its goals and what empirical evidence exists to support the proposed expectations?

One of the benefits of designing an accountability system by starting with a theory of action is that potential unintended, negative consequences may be minimized by including and checking the systemic assumptions that must hold in order for the system to function as intended. This check on the logic of the underlying assumptions of the various proposals will serve as important touchstone during the design process. Again, a theory of action is not just a bunch of pretty shapes and arrows. It must be an empirically and logically based argument that outlines how the specific proposed system will fulfil the stated goals and how it will do so.

Getting Started

While there is no single approach used for creating a theory of action, the following steps may be useful for developing a theory of action.

1. Clearly describe the **goals** of the accountability system. It is quite likely that there will be multiple goals for the system, but the state should try to narrow these down to the highest priority and highest consensus goals. These goals will certainly include the specific outcomes (see step #3), but will also include broader goals for the educational system.
2. The next step is to articulate the **purposes** and intended **uses** of the accountability system results. Being as clear as possible about the goals, purposes, and intended uses helps provide the foundation for the theory of action. (The purposes and uses of the system will be linked directly to attainment of the goals of the system through steps 3-7).
3. The design team should then agree on the specific intended **outcomes** of the system. For example, a likely intended common outcome for most ESSA accountability systems will be to increase the rates of college and career readiness (CCR) for all students. This outcome or outcomes will be closely related to the goals for the system.
4. The next step is to start laying out the **mediating outcomes** necessary to achieve the ultimate outcome(s). Using the example of improving the rates of CCR for all students, some important mediating variables could include such things as “teachers will engage students in meaningful learning activities,” “students will score higher on state

assessments”, “student growth trajectories will improve over time”, and “teachers (after receiving useful assessment information) will improve their instruction and curriculum.” These are just a few of many examples and the reader should note that some of these would be influenced prior mediating outcomes and each would need to be expanded by clarifying the mechanisms (see step #7).

5. We have found it helpful to create an initial “high-level” (large grain size) theory of action as a first step. This lays out the big picture components and illustrates how these major components are intended to relate to one another.
6. Once the high level theory of action is created, design teams should add enough details to articulate how these major components relate to the minor components. At a certain point, the design team will need to decide the level of detail that can be represented in a single diagram, if this is done pictorially, or in a single set of written steps or statements.
7. The final step involves “zooming in” on several key components of the theory of action to add the detail necessary to support the accountability design and the validity argument. This step is crucial because this is where the design teams have the opportunity to specify the hypothesized mechanisms by which the intended intermediate and final outcomes are thought to occur. Through these mechanisms, the uses of the accountability results will be linked to attainment of the goals. For example, a theory of action might suggest that providing accurate student growth information will lead to improved student learning. In this case, the design team, when working at this detailed level, should be expected to hypothesize the mechanisms or processes by which these growth data will lead to better learning outcomes for students such as the development of intervention programs for pockets of the state/districts/schools that have consistently low mean growth. The specification of this hypothesized mechanism then becomes a claim to be included in the validity argument.
8. Once the chain of logic for attaining system goals is clearly specified, the underlying assumptions which must hold in order for the system to function as intended should be articulated. To continue the example from item 7, if reporting student growth scores is intended to lead to improve student achievement through the use of targeted interventions, the assumption that the intervention is effective must be upheld. Assumptions such as this must be clearly stated in order to identify the conditions under

which the goals are most likely to be attained. Through this process of articulating assumptions, we will find that some assumptions are more likely to be violated than others. In the event we identify an assumption that is either likely to be violated, or if violated, consequences would be dire, this will signal a need to potentially revisit the design of the system and revise the theory of action.

As an example, we present a brief example of a theory of action for a teacher evaluation system shown in Figure 1 below. In reality, a theory of action used in practice would have many more details and would be much more elaborated. As seen in the figure below, the “focused and sustained professional development” is the mediating mechanism through which teachers get feedback on their practices and learn how to translate assessment information into useable instructional strategies. The assumptions that must hold for this to be true would be added alongside the connecting arrows.

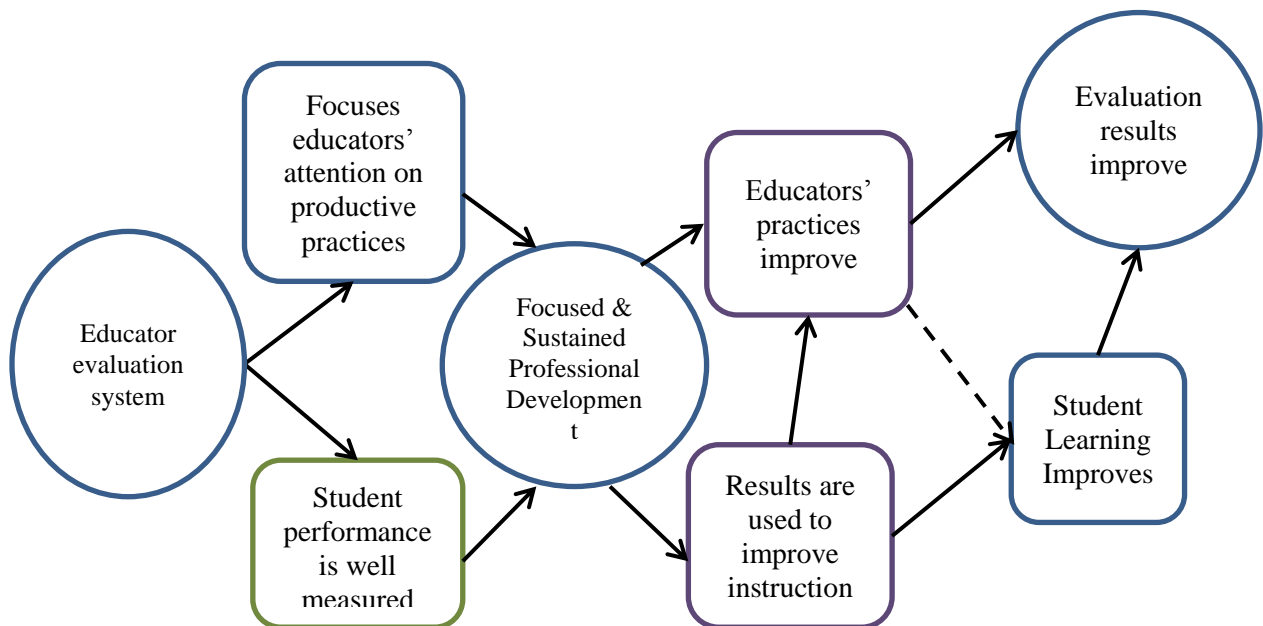


Figure 1. A theory of action for *improving practices and learning*

We intend for this document to serve as a useful starting point for New Hampshire in the development of a theory of action. The steps outlined above are just one of many possible approaches for generating a theory of action for an accountability system. There are undoubtedly many other approaches for accomplishing the same end, but we hope that this can serve as a useful example for getting started with this important task.